Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (withdrawn): An apparatus for temperature-conditioning a wafer, the apparatus comprising:

a heat transfer plate having an upper surface;

a heating or cooling device integrated with said heat transfer plate; and

a plurality of spacers projecting upwardly from the upper surface of said heat transfer plate at different locations thereon spaced from one another such that a wafer to be temperature-conditioned by heat transferred between said heat transfer plate and the wafer can be supported by the spacers while facing and being spaced from said heat transfer plate, said spacers being supported in the apparatus in such a way that the heights of projections provided by the spacers, as taken from the upper surface of said heat transfer plate, can be individually adjusted, whereby the spacing between a wafer, supported by the spacers, and the heat transfer plate and the inclination of the wafer relative to the upper surface of said heat transfer plate can be adjusted.

Claim 2 (withdrawn): The apparatus for temperature-conditioning a wafer as claimed in claim 1, and further comprising a plurality of guide pins extending from

the upper surface of said heat transfer plate at the periphery of the upper surface, and wherein each of said spacers comprises an annular member fitted freely around a respective one of said guide pins, whereby the annular member can be freely withdrawn from the guide pin so as to be replaceable.

Claim 3 (withdrawn): The apparatus for temperature-conditioning a wafer as claimed in claim 1, wherein each of said spacers is supported in the apparatus so as to be to be vertically movable and fixable in different vertical positions relative to the upper surface of said heat transfer plate.

Claim 4 (withdrawn): The apparatus for temperature-conditioning a wafer as claimed in claim 3, wherein each of the spacers comprises a pin threaded to the heat transfer plate so that the amount by which the spacer projects from the upper surface of said heat transfer plate can be adjusted by rotating the pin.

Claim 5 (withdrawn): The apparatus for temperature-conditioning a wafer as claimed in claim 4, and further comprising a plurality of motors each operatively associated with a respective one of said spacers, and a power transmission mechanism coupled between each of said motors and the spacer operatively associated therewith so as to transmit output torque of the motor to the spacer, whereby the motors rotate the spacers to raise and lower the same relative to said heat transfer plate.

Claim 6 (currently amended): A method of temperature-conditioning a wafer, the method comprising:

determining temperatures produced by a temperature-conditioning process at different locations across the surface of a wafer, and using the temperatures to pre-determine a [desired] distribution of surface temperatures [across] desired for a wafer [to be produced by a temperature-conditioning process];

subsequently placing a wafer in position above the upper surface of a heat transfer plate of a temperature-conditioning apparatus, which heat transfer plate produces heat used in carrying out the temperature-conditioning process;

while the wafer is spaced above the upper surface of the heat transfer plate, carrying out the temperature-conditioning process by transferring heat between the heat transfer plate and the wafer [to temperature-condition the wafer]; and

before the temperature-conditioning process is carried out on the wafer [is temperature-conditioned] using the heat transfer plate, determining a spacing of the wafer from the upper surface of the heat transfer plate and an inclination of the wafer relative to the upper surface of the heat transfer plate tending to produce said desired distribution of surface temperatures across the wafer when the wafer is [heat-treated] temperature-conditioned using the heat transfer plate, and wherein said placing of the wafer in position comprises setting the wafer above the heat transfer plate with said spacing and said inclination relative to the upper surface of the heat transfer plate.

Claim 7 (currently amended): The method of temperature-conditioning a wafer as claimed in claim 6, wherein said determining of the [desired distribution of surface] temperatures at different locations across the surface of a wafer comprises measuring the temperatures at said different locations across the surface of the wafer after the wafer is temperature-conditioned in a [different] temperature-conditioning apparatus different from that having said heat transfer plate, and said using the temperatures to determine a desired distribution of surface temperatures comprises selecting as the desired distribution of surface temperatures one which corresponds to the measured temperatures.

Claim 8 (original): The method of temperature-conditioning a wafer as claimed in claim 6, wherein said placing of the wafer in position comprises setting the wafer atop spacers projecting above the upper surface of the heat transfer plate, and adjusting the spacers to vary the amounts by which they project above the upper surface to ones necessary for producing the desired distribution of surface temperatures while the wafer is supported by the spacers above the heat transfer plate as the wafer is being heat-treated.

Claim 9 (original): The method of temperature-conditioning a wafer as claimed in claim 7, wherein said placing of the wafer in position comprises setting the wafer

atop spacers projecting above the upper surface of the heat transfer plate, and adjusting the spacers to vary the amounts by which they project above the upper surface to ones necessary for producing the desired distribution of surface temperatures while the wafer is supported by the spacers above the heat transfer plate as the wafer is being heat-treated.

Claim 10 (new): A method of temperature-conditioning a plurality of wafers, said method comprising:

measuring the temperatures at different locations across the surface of a wafer after the wafer is temperature-conditioned in a reference temperature-conditioning apparatus;

using the measured temperatures to determine a desired distribution of surface temperatures for the plurality of wafers;

disposing a plurality of temperature-conditioning apparatuses in parallel, each having a respective heat transfer plate;

placing each of the plurality of wafers in position above the upper surface of a respective heat transfer plate of the temperature-conditioning apparatuses, which heat transfer plate produces heat used in carrying out a temperature-conditioning process;

while the wafers are spaced above the upper surface of the heat transfer plates, respectively, carrying out the temperature-conditioning process on the wafers by transferring heat between the heat transfer plates and the wafers; and

before the temperature-conditioning process is carried out on the wafers using the heat transfer plates, respectively, independently determining for each heat transfer plate a spacing of the wafer from the upper surface of the heat transfer plate and an inclination of the wafer relative to the upper surface of the heat transfer plate tending to produce said desired distribution of surface temperatures across the wafer when the wafer is temperature-conditioned using the heat transfer plate, and wherein said placing of the wafers in position comprises setting the wafers above the heat transfer plates with said independently determined spacings and inclinations relative to the upper surface of the heat transfer plates.